

CLAIMS

1 1. Method for communicating at least one packet of data with a predetermined
2 packet size over a communication channel from a transmitter to a receiver, the
3 transmitter having a memory for storing a common set of data rates, the method
4 comprising the steps of:

5 fragmenting the at least one packet into a number of frames with a predetermined
6 frame size by the transmitter;

7 automatically selecting a combination of frame size and one of the common set of
8 data rates by the transmitter such that the transmission time of each of the frames is
9 limited to a predefined value; and

10 transmitting each frame over the communication channel by the transmitter.

1 2. Method according to claim 1, in which the predefined value of transmission time
2 is determined by characteristics of interference in the communication channel.

1 3. Method according to claim 2, in which the combination of frame size and data
2 rate is changed dependent on the condition of the communication channel.

1 4. Method according to claim 3, in which the condition of the communication
2 channel is determined based on success of transmission of each of the frames.

1 5. Method according to claim 4, in which success of transmission of each of the
2 frames is determined after a predetermined number of retries.

1 6. Method according to claim 5, in which the predetermined number of retries is at
2 least two.

1 7. Method according to claim 6 in which the predefined value of the transmission
2 time is 4.5 msec.

1 8. Method according to claim 6 in which the predefined value of the transmission
2 time is 1.5 msec.

1 9. Method according to claim 6 in which the frame size is one of a set of frame
2 sizes comprising 1500 bytes, 750 bytes, 500 bytes, 256 bytes and 128 bytes.

1 10. Method according to claim 6 in which the common set of data rates comprises
2 data rates of 11 Mbit/s; 5.5 Mbit/s; 2 Mbit/s and 1 Mbit/s.

1 11. Device for receiving or transmitting at least one packet of data with a
2 predetermined packet size over a communication channel between the device and a
3 second device, the device comprising:

4 a processor and memory means connected to the processor for storing a common
5 set of data rates, the processor being arranged to

6 fragment the at least one packet into a number of frames with a predetermined
7 frame size;

8 automatically select a combination of frame size and one of the common set of data
9 rates such that the transmission time of each of the frames is limited to a predefined
10 value; and

11 transmit each frame over the communication channel.

1 12. Device according to claim 11, in which the processor is further arranged to
2 execute the method according to claim 6.

1 13. Computer program comprising computer readable instructions, which comprise
2 method steps for controlling a transmitter that is communicating at least one data packet
3 with a predetermined packet size over a communication channel, the transmitter having
4 memory means for storing a common set of data rates, by:

5 fragmenting the at least one packet into a number of frames with a predetermined
6 frame size by the transmitter;

7 automatically selecting a combination of frame size and one of the common set of
8 data rates by the transmitter such that the transmission time of each of the frames is
9 limited to a predefined value; and

10 transmitting each frame over the communication channel by the transmitter.

1 14. Computer program according to claim 13, further comprising the method steps
2 according to claim 6.

1 15. Data carrier provided with a computer program according to claim 14.